SPECIFICATIONS FOR CHIPPER

Comply

GENERAL

Unit shall be a trailer mounted hydraulically feed drum chipper in the 21 inch (54 cm) capacity class. Length of basic unit shall not exceed 235 inches (597 cm) when in transport configuration (tongue retracted). Unit length is 259 inches (295 cm) equipped with a standard chute or 136 inches (346 cm) if equipped with an adjustable chute. Maximum weight of the base unit shall not be more than 14,700 pounds with remote control capabilities.

ENGINE

Unit shall have an industrial, liquid cooled, diesel engine equal to a Tier 3 emissions rated Cummins QSB 6.7, 275 hp @ 2500 rpm, 730 ft-lb of torque "@ 1500 rpm with a maximum displacement of 408 cubic inches (7 liters). Engine shall be equipped with a spin-on replaceable oil filter. Unit shall be equipped with a fuel tank with a minimum capacity of 65 gallons (146 liters). Unit shall be equipped with two 12 volt, 950 CCA batteries.

TRAILER

Trailer frame shall be constructed of C channel (2.5 x 8.75). Suspension shall be tandem rubber torsion type with a minimum 8,000 pound (3629 kg) rating each. Wheels shall be 17.5 by 6.75 inch (44.5 by 17cm) with 8 bolts on a 6.5 inch (16.5cm) circle. Tires shall be equal to LT235/75R17.5, load range J. The tongue shall extend 24 inches (61 cm) and the hitch, adjust up and down 8 inches (20cm). Unit shall be equipped with electric brakes. LED trailer lights shall be high mounted and set back from the in feed table.

CUTTING SYSTEM

The cutting system shall be drum style with a minimum drum size of 36 inches (91 cm) in diameter and 28 inches (72 cm) in width. The drum shall have a 4 position safety lock. The drum shall weigh a minimum of 1500 lbs (681 kg) including shaft. The drum shall have 4 knives, bolted in place with a minimum of 6 bolts per knife. The knife size shall be 5 x 14 inches (13 x 36 cm) with a minimum thickness of .5 inches (1 cm). The knives shall be double edged. Knives shall be constructed of A8 chipper steel.

FEED SYSTEM

The unit shall be equipped with a hydraulic in feed system. The feed system shall have 2 horizontal feed rollers with triangular shaped "nubbins" spaced 4.5" (11.4 cm) apart on the upper feed roller and 3" (7.6 cm) apart on the lower feed roller. The upper feed roller shall have a minimum diameter of 19" (48 cm) and minimum length of 40" (101 cm). The lower feed roller shall have a minimum diameter of 11" (28 cm) and a length of 40" (cm). The rollers shall be powered by 2 hydraulic motors. The feed rollers shall have a 4.9 cu in upper and the 55.6cu.in lower minimum displacement.The unit shall have a max. feed speed of 100 feet per minute (36 meters per minute). The feed table shall have a minimum length of 61 inches (155 cm) from the feed roller nip point to the end of the table. The drum opening shall be 21.5 x 28 inches (56x71cm)

The unit shall have a maximum table width of 72 inches (183 cm). The unit shall be equipped with a Smart Feed system that senses the loss of rpm from the engine and stops the feed system until the rpm of the engine recovers. The unit shall be equipped with a Smart Crush system which once the upper feed roller raises for four seconds, it will automatically increase down pressure on the material being fed. This allows the upper feed roller to easily climb onto large forked material before the increased down pressure is applied for maximum pulling force.

CUTTER DRUM ENGAGEMENT

Unit shall be equipped with clutch less belt tension design to engage the cutter drum. The clutch less belt design shall utilize a spring loaded torsion arm that engages the drum through a 5V poly belt.

FEED CONTROL BARS

The unit shall be equipped with a Bottom Feed Stop Bar located on the leading edge of the feed table. The Bottom Feed Stop Bar shall be strategically located to make it possible for the operator's leg to strike the bar & shut off the feed either intentionally or automatically in an emergency situation. A green override button shall be positioned within reach of both sides of the feed table to momentarily (30 second maximum) override the Bottom Feed Stop Bar if so required by the operator. The side feed control bar shall be painted red & the bottom bar shall have two sensitivity settings. The unit shall also be equipped with a red upper feed stop bar positioned across the full width of the top of the feed table, that when pulled down and rearward, will stop the feed rollers.

HYDRAULIC SYSTEM

The unit shall be equipped with "live" type hydraulics (hydraulic pump runs directly from the engine). The system shall be open center with a return type filtration system with a minimum filtration of 10 micron return, 100 micron suction. The unit shall be equipped with 3 hydraulic pumps and shall have a minimum capacity of 13 gallons (49 liters) per minute a maximum rpm with a relief pressure of 2750 psi (190 bar), 9 gallons (34 liters) per minute at maximum rpm with a relief pressure of 3000 psi (207 bar) and 2 gallons (8 liters) per minute at a maximum rpm with a relief pressure of 1600 psi (110 bar). The unit shall have a hydraulic tank with a 24 gallon (91 L) capacity and an oil cooler mounted next to the radiator.

INSTRUMENTATION/STORAGE

The unit shall have an engine information display that toggles between hour meter, oil pressure, water temperature, and engine fault codes as well as engine warning and shutdown lights. The engine shall be equipped with an automatic high water temperature/low oil pressure shutdown system. The unit shall have a lockable tool box, lockable engine compartment/battery box and lockable fuel & hydraulic oil fills. The unit shall be equipped with two towing safety chains with a minimum size of .375 inches (1 cm) and slip hooks with spring loaded latches. The trailer shall be equipped with a heavy duty hydraulic

tongue jack with a minimum capacity of 5000 pounds (2268 kg).
Hydraulic outriggers

DISCHARGE SYSTEM

The discharge chute shall be no less than 116 inches (295 cm) high. Rotation shall be limited to 270 degrees and controlled with a chain driven lockable hand crank offering infinite chute positions. The chute controls are to be hydraulic and adjustable deflector.

WARRANTY

Warranty will be a minimum of 3 year 3000 hours parts and labor.
Bidder will summit in writing what is covered and what is not covered in warranty.
Bidder will be responsible for pickup and delivery for warranty work if needed.
Name & Telephone Number of contact for Warranty work
Bidder will be responsible to have all warranty forms filled out at delivery of equipment.

MANUALS

Operator, Service, Maintenance, Rebuild, Parts books & Software shall be furnished by Vendor. Internet manuals & parts are not allowed. If subscription type or software on disk Vendor shall provide.

DIAGNOSTICS

All Diagnostics software for laptop PC for all ECM's on equipment.
If trouble codes for diagnostic software is internet type - Vendor will provide a copy of all codes either on CD Rom or paper in a ring binder.
If OEM software for laptop is not available an aftermarket software and or reader(s) to read codes and change customers parameters would be acceptable with prior approval.

TRAINING

On site basic training on equipment by service technician or rep. on delivery.

Contact: Ken Winegarden (Shorty), Shop Leadperson
Telephone: 608-339-3355

Delivery To: Adams County Highway Department
1342 County Road F
Adams, WI 53910